Road Damage Detection Report

Using YOLO Model

Introduction

This report provides an analysis of road damages detected using the YOLO model. The primary objective is to identify and categorize different types of road damages to assist in maintenance planning. The YOLO (You Only Look Once) model is a state-of-the-art object detection system that is fast and accurate. It processes images in real-time and can identify various types of objects, including different categories of road damages. By utilizing this model, we aim to streamline the process of road inspection and maintenance scheduling.

Types of Damages

Alligator Cracks	16
Damaged crosswalk	2
Damaged paint	11
Longitudinal Cracks	1
Manhole cover	3
Potholes	1
Transverse Cracks	3

Conclusion

The analysis indicates that the most common type of damage is Alligator Cracks. Immediate attention is recommended for areas with severe damages. Regular monitoring and timely repairs can help prevent further deterioration of the road infrastructure.

Recommendations

1. Prioritize repair for Alligator Cracks.
2. Conduct regular monitoring to track changes and new damages.
3. Implement a maintenance schedule based on the severity and frequency of the detected damages.
4. Utilize advanced detection models like YOLO for continuous and efficient road inspection.